

## FLORIDA COOPERATIVE MAPPING PROJECT

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A multitude of water-related societal issues face southern Florida in the 1990's. These include irrigation demands of agricultural business, run-off from agricultural lands and canals, increasing demands of a rapidly growing population in the Naples and Miami areas (Miami showing the fourth fastest growth rate in the U.S. during the 1980's), the recently mandated restoration of natural sheet flow through the Everglades ecosystem, and the vitality of the important fisheries of Florida Bay.

This project is to provide the framework for understanding (1) the resource distribution (water, phosphate, etc.) in the subsurface of Florida (i.e., the detailed geology of constraining and resource units) and (2) ecosystem variability and change prior to and during human development of South Florida (i.e., the detailed

ecosystem history over the last 200 years demonstrating natural variability and true change).

### PROJECT SUMMARY:

This project is divided into 5 subprojects:

1. Ecosystem History: Terrestrial and Fresh-Water Ecosystems of Southern Florida.
2. Ecosystem History of Florida Bay and the Southwest Coast.
3. Ecosystem History of Biscayne Bay and the Southeast Coast.
4. Hydrogeology of the surficial aquifer system in southwest Florida.
5. Cenozoic/Holocene stratigraphy, biostratigraphy, and paleoecology of Florida.

The Florida Cooperative Mapping Project was created to consolidate the Geologic Division's pale-

ontological, geological framework, and its ecosystem history studies under a single managerial umbrella. This project is jointly funded by the Ecosystem Initiative and National Cooperative Geologic Mapping Program. The project is closely tied to projects of the Florida Geological Survey, Water Resources Division of the USGS, South Florida Water Management District, and other federal, state, and local agencies.

The project plans: (1) To establish modern census sites and sample them every six months for the duration of the project, providing yearly progress reports on the modern census data. (2) To analyze one to three undisturbed cores for each ecosystem history subproject yearly, providing summary reports of core upon completion of analysis. (3) Drill numerous coreholes for analysis of the southwest

Florida surficial aquifer system, to analyze the cores, and provide summary reports. (4) To describe and analyze several long cores, with the Florida Geological Survey, for establishing the geologic

framework of Florida. (5) To provide paleontological and isotopic support work (as SUPPORTMAP) for activities of the Geological Investigations Projects of the Florida Geological Survey.

#### FOR MORE INFORMATION:

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## FLORIDA COOPERATIVE MAPPING PROJECT ACTIVITIES

